Application No.: 10/001,736 Serial No.: October 31, 2001

AMENDMENTS TO THE CLAIMS

Please add new Claims 61 and 62 as follows.

Please cancel Claims 1, 2, 4-7, 9-20, 22-36, and 39-58 without prejudice.

- 1-36 (Cancelled)
- 37. (Previously Presented) A method of adaptive encoding at least a part of a current frame of a sequence of frames of framed data, with respect to a reference frame comprised in the sequence, the method comprising:

dividing the reference frame into blocks and identifying selected blocks of the reference frame in accordance with the performance of a first sub-encoding that is applied to the reference frame:

computing a characteristic based on the identifying of the blocks and from the frames of the sequence only those frames that are a reference frame, wherein the identifying of the blocks depends upon motion vectors determined for the blocks, and wherein the blocks of the reference frame have a first identity when the blocks are intracoded or when the blocks have a substantial zero motion vector, the blocks of the
reference frame have a second identity otherwise, the computed characteristic being based
on:

measures of prediction errors of blocks with the first identity; and
measures of prediction errors of blocks with a second identity combined
with the time elapsed between the current frame and the reference frame;
performing the first sub-encoding on the current frame; and

performing a second sub-encoding on the first sub-encoded frame, the second sub-encoding adapting at least one encoding parameter based at least in part upon the computed characteristic.

38. (Previously Presented) A method of adaptive encoding at least a part of a current frame of a sequence of frames of framed data, with respect to a reference frame comprised in the sequence, the method comprising: dividing the reference frame into blocks, wherein the blocks of the reference frame have a first identity when the blocks are intra-coded or when the blocks have a substantial zero motion vector, the blocks of the reference frame have a second identity

> measures of prediction errors of blocks that have the first identity, and measures of prediction errors of blocks that have the second identity combined the time elassed between the current frame and the reference frame:

identifying selected blocks of the reference frame in accordance with the performance of a first sub-encoding that is applied to the reference frame;

computing a characteristic based on the identity of the blocks;

otherwise, computing a characteristic which is based on:

performing the first sub-encoding on the current frame; and

performing a second sub-encoding on the first sub-encoded frame, wherein the second sub-encoding adapts at least one encoding parameter based on the computed characteristic.

39-58 (Cancelled)

 (Previously Presented) The method of Claim 37, wherein the characteristic is a sum of at least:

the sum of all measures of prediction errors of blocks that have the first identity; and

a normalized sum of all measures of prediction errors of blocks that have the second identity multiplied by the time elapsed between the current frame and the reference frame.

60. (Previously Presented) The method of Claim 38, wherein the characteristic is a sum of at least:

the sum of all measures of prediction errors of blocks that have the first identity; and

a normalized sum of all measures of prediction errors of blocks that have the second identity multiplied by the time elapsed between the current frame and the reference frame. Application No.: 10/001,736 Serial No.: October 31, 2001

61. (New) A method of adaptive encoding at least a part of a current frame of a sequence of frames of framed data, with respect to a reference frame comprised in the sequence, the method comprising:

dividing the reference frame into blocks and identifying selected blocks of the reference frame in accordance with the performance of a first sub-encoding that is applied to the reference frame, wherein the identifying selected blocks depends upon motion vectors determined for the blocks:

computing a characteristic indicative of an energy content, the characteristic being determined by prediction without using a result of the first sub-encoding of the current frame, without using blocks of the current frame, and based on the identifying of the blocks and from the frames of the sequence only those frames that are a reference frame, wherein computing of the characteristic is based upon the time elapsed between the current frame and the reference frame or frames:

performing the first sub-encoding on the current frame; and

performing a second sub-encoding on the first sub-encoded frame, the second subencoding adapting at least one encoding parameter based at least in part upon the computed characteristic, wherein the blocks of the reference frame have a first identity when the blocks are intra-coded or when the blocks have a substantial zero motion vector, the blocks of the reference frame have a second identity otherwise, the computed characteristic being the sum of:

the sum of all measures of prediction errors of blocks with the first identity; and

a normalized sum of all measures of prediction errors of blocks with the second identity multiplied with the time elapsed between the current frame and the reference frame.

62. (New) A method of adaptive encoding at least a part of a current frame of a sequence of frames of framed data, with respect to a reference frame comprised in the sequence, the method comprising:

dividing the reference frame into blocks;

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identifying selected blocks of the reference frame in accordance with the performance of a first sub-encoding that is applied to the reference frame;

performing the first sub-encoding on the current frame;

computing a characteristic indicative of an energy content based on the identifying of the blocks and from the frames of the sequence only those frames that are a reference frame, wherein the characteristic is determined by prediction without using the first subencoded frame and without using blocks of the current frame, wherein computing of the characteristic is based upon the time elapsed between the current frame and the reference frame or frames, and wherein the computing of the characteristic is derived at least in part by calculating the time elapsed between the current frame and the reference frame wherein the blocks of the reference frame have a first identity when the blocks are intracoded or when the blocks have a substantial zero motion vector, the blocks of the reference frame have a second identity otherwise, the computed characteristic being the sum of:

the sum of all measures of prediction errors of blocks that have the a first identity; and

a normalized sum of all measures of prediction errors of blocks that have the second identity multiplied by the time elapsed between the current frame and the reference frame;

performing the first sub-encoding on the current frame; and

performing a second sub-encoding on the first sub-encoded frame, wherein the second sub-encoding adapts at least one encoding parameter based on the computed characteristic.